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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/923,598 | 08/06/2001 | James Toth | MP1726-US1 | 1593 |
| 27788 | 7590 | 11/14/2003 | EXAMINER | |
| TYCO ELECTRONICS CORPORATION MAIL STOP R20/2B 307 CONSTITUTION DRIVE MENLO PARK, CA 94025 | | | EASTHOM, KARL D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2832 | |

DATE MAILED: 11/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 09/923,598 | Applicant(s) TOTH ET AL. | |
| | Examiner Karl D Easthom | Art Unit 2832 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 8, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Oo (JP 5-109505). Oo discloses the claimed invention at Figs. 1-2 with PTC element 11, electrodes 12, and lead 13 having portion 13a bent to be a barrier portion between the connection and attachment portions. Or the resin 14 is a barrier portion on the lead, which meets claims 2-4, and 13. The leads comprise metal for claim 5. In claim 7, one edge of the lead is at 90 degrees to a perpendicular edge of the other lead. In claims 1-2, 9, 11, 12 the bend is a wall as the barrier portion. When the barrier is attached is not material to the structure.

3. Claims 1-8, 12, 15, and 17-18 are rejected under 35 U.S.C. 102(b,e) as being anticipated by Kitamoto et al. (WIPO published 1997). Kitamoto discloses the claimed invention at Figs. 1 or 10 with leads 17, 18,, PTC material 9, batteries 29 at Fig. 5, and electrodes 11, 13. The barrier 67 is attached to the lead 21 before attachment. Or the lead 21 has a raised cut out where it is raised in relation to the PTC element 9 and is cut out to accommodate 67 or is cut out between its ends. . Element 25 is a barrier with a raised cutout, since it is raised with respect to other portions of the device, or the tabs 51, 53 are walls or dams at Fig. 7. The whole device is a strap

as one looks at Fig. 8. In claim 10, the portion 21 is a barrier that has a cutout where in Fig. 4 one can see the thinner barrier portion has been "cutout" from the remaining wider portions of the leads. In claims 18, welding is at col. 8, lines 50-56. In claim 2, the second barrier portion is the insulation 23. In claims 3-4, the barrier portion or bent portion of 21 appears at least as high as the thickness of t for the PTC material 9. In claims 6, the orientation is along the axis from left to right. In claim 7, see Fig. 4, where the radial portion 19 of 21 is at 90 degrees to the tangent of the of the disc shaped lead 17.

4. Claims 1-8 and 12-17 are rejected under 35 U.S.C. 102(b) as anticipated by Gemperle et al. Gemperle discloses the claimed invention at Fig. 4 with first and second leads 3A, 3B each having a wall, or dam, or raised cut out, (where the lead portions are raised and cut.) The PTC elements 1 have first and second electrodes, see top of col. 8. In claims 13-16, the tape at col. 6, lines 53-62 meets the claims since it covers the whole device. In claim 17, it is not material that the device is not designed to block splatter where it can. In claim 7, portions of the leads are so oriented since they both bend or have cuts. In claims 3-4, the thickness is as shown to hold the PTC devices. In claims 5 and 12, the leads are metal. For claim 8, the PTC material is polymeric. .

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oo (JP 5-109505), as applied to claims above, further in view of Kitamoto et al. or Chandler The

invention is as disclosed above except for welding. Kitamoto et al. discloses welding is a suitable means for electrode/lead attachment at col. 8, lines 50-59. Chandler makes a similar disclosure as noted above. It would have been obvious to employ the well known method of lead attachment for making a secure connection where Oo discloses attachment by any known means for a similar battery protection device at par. 8.

7. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oo (JP 5-109505), or Kitamoto et al., as applied to claims above, further in view of Banich et al. or Gemperle. The invention is as disclosed above except for the insulation being tape. Banich or Gemperle discloses that tape is a suitable type of insulation such that it would have been obvious to replace the insulation of Oo or Kitamoto et al. with tape in order to apply same quickly for good well known electrical insulation.

8. Applicant's arguments filed 8/6/01 have been considered but are moot, or are persuasive as to the removed rejections. Applicant argues that Oo does not disclose the barrier. This is not correct where the bend is a wall. The argument that the barrier of insulation is not added before lead attachment to the first electrode is persuasive so that claim 2 is no longer rejected over Oo. Applicant argues Kitamoto is not a strap device, but the long thin portion of lead 21 shown extended at Fig. 7 is in the form of a strap and renders the device so, according to the normal understood definition of the term. Again, the bend is a wall, as is the part 67 as noted above. Or see the tabs 53, or cutout 25. Chandler and Fellner have been removed as applicant argues they are not strap devices. Motivation for supplying the combining references is as noted above. Tape is well known as insulation, while Oo Kitamoto and Chandler all teach battery protection..


9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D Easthom whose telephone number is 703 308-3306. The examiner can normally be reached on M-Th, 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 703 308-1976. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0956.



Karl D Easthom
Primary Examiner
Art Unit 2832

KDE